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08/355460

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United States Patent [19]**Hudziak et al.**[11] **Patent Number:** **6,015,567**[45] **Date of Patent:** **Jan. 18, 2000**[54] **HER2 EXTRACELLULAR DOMAIN**[75] **Inventors:** **Robert Michael Hudziak**, San Bruno;
H. Michael Shepard, San Francisco,
both of Calif.; **Axel Ullrich**,
Martinsried, Germany[73] **Assignee:** **Genentech, Inc.**, South San Francisco,
Calif.[21] **Appl. No.:** **08/422,108**[22] **Filed:** **Apr. 14, 1995****Related U.S. Application Data**[62] Division of application No. 08/355,460, Dec. 13, 1994,
abandoned, which is a continuation of application No.
08/048,346, Apr. 15, 1993, abandoned, which is a continu-
ation of application No. 07/354,319, May 19, 1989, aban-
doned.[51] **Int. Cl.⁷** **A61K 38/00**; C07K 14/705;
C07K 19/00[52] **U.S. Cl.** **424/277.1**; 424/185.1;
424/192.1; 424/278.1; 424/282.2; 530/402;
530/403[58] **Field of Search** 424/185.1, 192.1,
424/278.1, 277.1, 282.2; 530/402, 403[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—Thomas M. Cunningham*Assistant Examiner*—Martha Lubet*Attorney, Agent, or Firm*—Wendy M. Lee[57] **ABSTRACT**

A method of treating a human patient via active immuno-
therapy comprising administering an effective amount of
extracellular portion of human HER2 receptor to the patient
wherein the method provokes a cell-mediated immune
response to HER2 receptor in the patient treated therewith.

26 Claims, 13 Drawing Sheets